

***Gilia leptomeria* A. Gray**
Great Basin gilia
Polemoniaceae (Phlox Family)

Status: State Threatened

Rank: G5S1

General Description: Adapted from Hickman (1993): *Gilia leptomeria* is an annual herb with 1 to many spreading stem branches 2 ¾ to 9 in. (7-23 cm) tall, that are covered with glands and minutely covered with fine, short hairs. The lanceolate or strap-shaped basal rosette leaves are strongly appressed to the ground, 1/8 to 2½ in. (1-6 cm) long, and have lobes that are toothed or rounded, with short points at the tips. The stem leaves are minimal, linear and entire. The glandular inflorescence is open, with the flowers at the terminus of the branches. There are 1 to 3 flowers per stem. The sepals are 1/16 to 1/8 in. (2-3 mm) long, with thickened lobe tips. The white corolla is 1/8 to ¼ in. (4-7 mm) long with lobes that are squared off at the base and more mucronate (short-pointed) tips; the tube is 1½ to 3 times the length of the sepals, thread-like, and purple with a yellow throat. The stamens and style slightly protrude beyond the corolla. The pollen is white. The narrowly ovoid fruit is 1/8 to ¼ in. (3-5 mm) long.

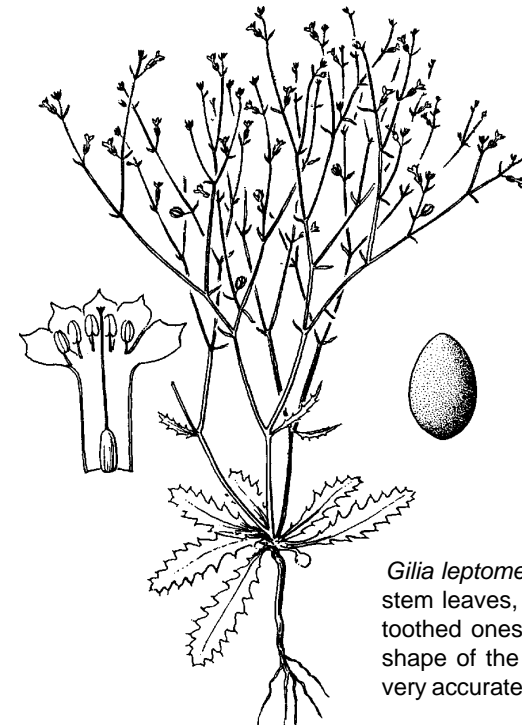
Identification Tips: There are a number of annual species of *Gilia* in central Washington that might be confused with *Gilia leptomeria*. These fall into two groups: those with basal rosettes of leaves and those without. There are three species with basal rosettes that can all be found in sandy areas in central Washington: *Gilia sinuata*, *Gilia lottiae*, and *Gilia leptomeria*. *Gilia leptomeria* is the only species with the combination of clearly mucronate-tipped corolla lobes (petals) linear, minute stem leaves and basal leaves with fine, short hairs. It is also more delicate and has a more reddish cast to the basal leaves than the other two species. *Gilia lottiae* has entire corolla lobes and basal leaves with a hairless and shining upper surface. *Gilia sinuata* is a more robust species with entire corolla lobes and wider, toothed stem leaves. Although *G. leptomeria* is described in Hitchcock (1959), it is actually a description of *G. lottiae* Day. The best key to use is Hickman (1993).

Phenology: This taxon has been observed in flower in May.

Range: *Gilia leptomeria* is distributed throughout the Great Basin from California to Oregon, Idaho, New Mexico and Colorado. The documented occurrences in Grant, Benton, and Franklin counties, Washington, are several hundred miles north of their previously known ranges.

Habitat: This species is found in very open habitats on gravelly bluffs, in sandy swales and on caliche, from 470 to 1140 feet (143-347 m), with big sagebrush (*Artemisia tridentata*), spiny hop-sage (*Grayia spinosa*), bitterbrush (*Purshia tridentata*), matted cryptantha (*Cryptantha circumcissa*), small-flowered evening-primrose (*Camissonia minor*),

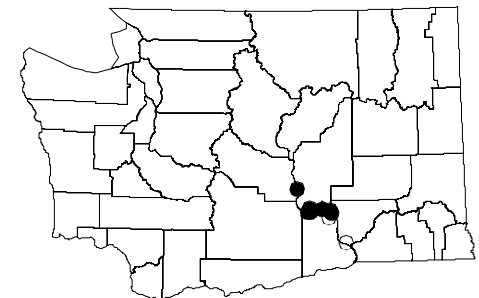
Gilia leptomeria
Great Basin gilia



Gilia leptomeria has entire stem leaves, rather than the toothed ones shown here. The shape of the corolla lobes is very accurate.

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Illustration by Jeanne R. Janish

Known distribution of
Gilia leptomeria
in Washington



● Current (1980+)
○ Historic (older than 1980)

Gilia leptomeria

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Florence Caplow



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2005 Produced as part of a cooperative project between the Washington Department of Natural Resources, Washington Natural Heritage Program and the U.S.D.I. Bureau of Land Management. Persons needing this information in an alternative format, call (360) 902-1600 or TTY (360) 902-1125.

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Sandberg's bluegrass (*Poa sandbergii*), Indian rice grass (*Oryzopsis hymenoides*), hoary aster (*Machaeranthera canescens*), sinuate gilia (*Gilia sinuata*), and cheatgrass (*Bromus tectorum*).

Ecology: This species occurs in semiarid regions in dry, gravelly or sandy, fine reddish to blackish basalt soils, or fine non-basalt gravel with caliche fragments. The substrate is often hard-packed. The primary factor is the extreme dryness and lack of competition within the habitat. Areas with other species of rare dryland annuals (*Camissonia minor*, *Camissonia pygmaea*, *Eatonella nivea*, *Loeflingia squarrosa*) may also support this species.

State Status Comments: There are less than 10 recent occurrences of the species in Washington.

Inventory Needs: Appropriate habitats in Grant, Benton, Franklin and adjacent counties should be systematically surveyed for new populations. Because the species is an annual, population location and numbers are likely to vary from year to year according to weather conditions.

Threats and Management Concerns: Some of the known populations are within portions of the Hanford Reach National Monument that are open to the public and could be affected by recreational use. Populations are also vulnerable to earth-moving disturbance and weedy species.

Comments: In 1993, Alva Day segregated *Gilia lottiae* Day from *Gilia leptomeria* A. Gray (Day 1993). Hickman (1993) contains the most recent key and descriptions for the western taxa of *Gilia*.

References:

Day, A.G. 1993. New taxa and nomenclatural changes in *Allophyllum*, *Gilia*, and *Navarettia* (Polemoniaceae). *Novon* 3:331-340.

Hickman, J.C. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley. 1400 pp.

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1959. *Vascular Plants of the Pacific Northwest Part 4: Ericaceae Through Campanulaceae*. University of Washington Press, Seattle, WA. 510 pp.

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